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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,338	10/09/2001	Wayne Milton Schott	US 010480	6212

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Corporate Patent Counsel
U.S. Philips Corporation
580 White Plains Road
Tarrytown, NY 10591

EXAMINER
MCCLOUD, RENATA D

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 11/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/973,338	SCHOTT, WAYNE MILTON	
	Examiner	Art Unit	
	Renata McCloud	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the corr spondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over H.F. Olson (U.S. Patent 2,688,373) in view of Klayman (U.S. Patent 5,177,329).

H.F. Olson teaches:

Claims 1 and 9: an acoustical enclosure comprising a speaker box comprising walls that enclose an acoustic chamber (e.g. Fig. 4, #15), a partition coupled to the interior surfaces of the speaker box that divides the chamber into first and second chambers (e.g. Fig. 4, #21), a first speaker mounted within the partition in which the front of the speaker has access to the first chamber and the back portion of the speaker has access to the second chamber (e.g. Fig. 4, #33), and a second speaker mounted in one of the walls enclosing the chamber wherein a front portion of the second speaker has access to the air outside of the speaker box, and the back portion of the second speaker has access to the second chamber (e.g. Fig. 4, #29), and referring to claim 9, a second speaker enhancing the acoustical performance of the acoustical chamber of the enclosure (e.g. Column 8:26-40).

However, it is unclear if H.F. Olson teaches (a) at least one wall enclosing the acoustic chamber comprising portions forming an external vent to the second chamber or (b) the second speaker enhancing the acoustical performance of the acoustical chamber of the enclosure by extending a range of low frequency response to 30 Hz. Klayman teaches this (a): (e.g. Fig. 1, # 20) and (b): (e.g. Column 2:55-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the enclosure taught by H.F. Olson to include an external vent to the second chamber and the second speaker enhancing the acoustical performance of the acoustical chamber of the enclosure by extending a range of low frequency response to 30 Hz as taught by Klayman. The advantage of this would be an acoustic enclosure with decreased destructive interference and improved low frequency sound production.

H.F. Olson also teaches:

Claims 2, 4, 6, 8, and 10: the partition comprises portions that form an internal vent between the first chamber and the second chamber (e.g. Fig. 4, #23); Col 4: 63-65

Claim 3: the first speaker and the second speaker are connected in phase electrically (e.g. Fig. 5); and

Claim 5: a volume of the first chamber is increased due to the second speaker within one of the walls enclosing the chamber (e.g. Column 8:26-40).

Claim 7: Klayman teaches the enclosure having a low frequency response range that extends to 30Hz (e.g. Column 2:55-60).

Claim 11: H.F. Olson teaches a method for enhancing acoustical performance of a dual chamber acoustical enclosure. However it is unclear if H.F. Olson teaches the method for enhancing acoustical performance of a dual chamber acoustical enclosure by extending a range of low frequency response of the dual acoustical enclosure to about 30 Hz. Klayman teaches this (e.g. Column 2:55-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by H.F. Olson to include extending the range of low frequency response of the enclosure to about 30 Hz. The advantage of this would be a method that causes an acoustic enclosure to have with decreased destructive interference and improved low frequency sound production.

H.F. Olson also teaches:

Claim 12: placing a first speaker within a partition that separates a first chamber and a second chamber of the dual enclosure, wherein a front portion of the first speaker has access to the first chamber and a back portion of the first speaker has access to the second chamber (e.g. Fig. 4, #29), and electrically connecting the first speaker and second speaker in phase electrically (e.g. Fig. 5);

Claims 13 and 15: placing an internal vent in the partition between the first chamber and the second chamber (e.g. Fig. 4, #23); and

Claim 14: increasing the volume of the first chamber due to the presence of the second speaker within the wall of the first chamber of the dual chamber (e.g. Column 8:26-40).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (703) 308-1763. The examiner can normally be reached on Mon.-Thurs and every other Fri. from 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (703) 308-3370. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Renata McCloud
Examiner
Art Unit 2837

RDM
November 25, 2002

ROBERT E. NAPPI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800